

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1(canceled)

Claim 2 (currently amended): An isolated nucleic acid molecule encoding a replication competent recombinant Hepatitis C Virus (HCV) genome, which nucleic acid is derived from HCV-derived fragment I377/NS3-3'UTR (SEQ ID NO: 1) ~~comprises from 5' to 3' on the positive sense nucleic acid~~

~~(a) a functional 5' HCV non-translated region (NTR) comprising an extreme 5' terminal conserved sequence;~~

~~(b) at least one open reading frame (ORF) encoding a heterologous gene operatively associated with an expression control sequence, wherein the heterologous gene and expression control sequence are oriented on the positive-strand nucleic acid molecule;~~

~~(c) an ORF encoding at least a portion of an HCV polyprotein whose cleavage products form functional components of HCV virus particles and RNA replication machinery, and~~

~~(d) an HCV 3' NTR comprising an extreme 3' terminal conserved sequence, and~~

wherein said nucleic acid contains at least one mutation in the HCV sequence of I377/NS3-3'UTR (SEQ ID NO: 1) and is able to replicate efficiently when transfected into a ~~susceptible~~

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human hepatoma cell line Huh-7 without reducing the growth rate of said cell line by more than 10-fold.

Claims 3-4 (canceled)

Claim 5 (currently amended): The isolated nucleic acid molecule according to claim 2 or 23, which is selected from the group consisting of double stranded DNA, single stranded DNA, double stranded RNA, and single stranded RNA.

Claim 6 (currently amended): The isolated nucleic acid molecule of claim 2 or 23, which has a sequence that is not more than 99.9% identical and is at least 95% identical to the HCV-derived fragment I377/NS3-3'UTR (SEQ ID NO: 1).

Claim 7 (currently amended, withdrawn): The isolated nucleic acid molecule of claim 6 comprising the nucleotide sequence of HCVR 2 (SEQ ID NO: 2).

Claim 8 (currently amended, withdrawn): The isolated nucleic acid molecule of claim 6 comprising the nucleotide sequence of HCVR 8 (SEQ ID NO: 3).

Claim 9 (currently amended): The isolated nucleic acid molecule of claim 6 comprising the nucleotide sequence of HCVR 9 (SEQ ID NO: 4).

Claim 10 (currently amended, withdrawn): The isolated nucleic acid molecule of claim 6 comprising the nucleotide sequence of HCVR 22 (SEQ ID NO: 5).

Claim 11 (currently amended, withdrawn): The isolated nucleic acid molecule of claim 6 comprising the nucleotide sequence of HCVR 24 (SEQ ID NO: 6).

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Claim 12 (currently amended): A stable cell line transfected with the isolated nucleic acid molecule according to claim 2 or 23, wherein said cell line:

(e) is derived from a human hepatoma cell line Huh-7,

(f) has a growth rate which is not less than 10% of the growth rate of the corresponding naïve Huh-7 cell line, and

(g) is capable of supporting efficient replication of said isolated nucleic acid.

Claims 13-14 (canceled)

Claim 15 (currently amended, withdrawn): The cell line of claim 12 ~~14~~ designated HCVR 2 and having ATCC Accession No. PTA-2489.

Claim 16 (currently amended, withdrawn): The cell line of claim 12 ~~14~~ designated HCVR 8 and having ATCC Accession No. PTA-2490.

Claim 17 (currently amended, withdrawn): The cell line of claim 12 ~~14~~ designated HCVR 9 and having ATCC Accession No. PTA-2486.

Claim 18 (currently amended, withdrawn): The cell line of claim 12 ~~14~~ designated HCVR 22 and having ATCC Accession No. PTA-2487.

Claim 19 (currently amended, withdrawn): The cell line of claim 12 ~~14~~ designated HCVR 24 and having ATCC Accession No. PTA-2488.

Claim 20 (withdrawn): A method of screening for anti-HCV therapeutics, which method comprises comparing a test level of HCV subgenomic replicon RNA or replicon RNA-associated

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protein expression in the cell line of claim 12 that has been contacted with a candidate therapeutic agent, to a control level of HCV subgenomic replicon RNA or replicon RNA-associated protein expression in the cell line that has not been contacted with the candidate therapeutic agent, wherein a decrease in the test level of HCV subgenomic replicon RNA or replicon RNA-associated protein expression is indicative of the inhibitory activity of the agent.

Claim 21 (withdrawn): A method for detecting antibodies to HCV in a biological sample from a subject comprising contacting said sample with the protein fractions derived from the cell line of claim 12 under conditions that permit interaction of HCV-specific antibodies in the sample with the HCV protein(s) produced in said cell line, followed by detecting binding of the antibodies in the sample to these HCV-derived protein(s), wherein said binding is indicative of the presence of HCV infection in the subject from which the sample was derived.

Claim 22 (withdrawn): The method of claim 21 wherein said biological sample is selected from the group consisting of blood, serum, plasma, blood cells, lymphocytes, and liver cells.

Claim 23 (new): An isolated nucleic acid molecule encoding a replication competent recombinant Hepatitis C Virus (HCV) genome, which nucleic acid molecule has the same sequence as the sequence of an HCV-derived nucleic acid produced from HCV-derived fragment I377/NS3-3'UTR (SEQ ID NO: 1), which HCV-derived nucleic acid is produced according to the following steps:

- (i) transfecting the corresponding RNA into human hepatoma cell line Huh-7, followed by

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(ii) culturing for about three weeks in the presence of about 1mg/ml G418,
followed by

(iii) transferring of resistant colonies and passaging about 1-2 times a week for at
least about two more weeks, followed by

(iv) isolating recombinant replicons from the cell clones characterized by a
growth rate which is not more than about 10-fold lower than the growth rate of
the Huh-7 cell line prior to transfection,

wherein said nucleic acid molecule contains at least one mutation in the HCV sequence of HCV-
derived fragment I377/NS3-3'UTR (SEQ ID NO: 1) and is able to replicate efficiently when
transfected into Huh-7 cell line.